The following claims are presented for examination:

1. (Currently Amended) A method comprising:

receiving, by a processor-based device, a communication that comprises a word that is a natural-language word;

generating by the processor-based device a ~~union~~ **combination** of terms**, based on the word,** comprising:

(i) a ~~first~~ set of word-terms, and

(ii) a set of word-classes**,**

wherein a term is one of a word-term and a word-class;

selecting by the processor-based device a plurality of terms from the ~~union~~ **combination** of terms, wherein the selecting is based on an information-gain value of each term in the ~~union~~ **combination** of terms; **[[and]]**

~~performing, by the processor-based device, latent semantic indexing upon the plurality of terms to determine a category of the word~~

generating by the processor-based device a matrix, wherein:

> **(i) the matrix comprises a plurality of categories and the plurality of terms, and**

> **(ii) each term in the matrix is associated with at least one category; and**

determining from the matrix, by the processor-based device, a category for the word.

2. (Cancelled)

3. (Currently Amended) The method of claim 1 further comprising:

routing **the communication,** by the processor-based device**,** ~~the communication~~ to a particular one of a plurality of destination terminals of a communication system**,**

wherein the routing is based on the category of the word, **and** wherein the communication system comprises the processor-based device and the plurality of destination terminals.

4.   (Currently Amended) The method of claim 1 wherein an automatic word class clustering algorithm is utilized to generate **a plurality of word-classes from which** the **set of** word-classes **is selected**.

5.   (Currently Amended) The method of claim 1 wherein the selecting of the plurality of terms is further based on a percentile value applied to the respective information-gain value**[[s]]** of ~~the terms~~ **each term** in the ~~union~~ **combination** of terms.

6.   (Currently Amended) The method of claim 5 wherein the information~~-~~gain value for each term in the ~~union~~ **combination** of terms, indicates the average entropy variations over a plurality of possible categories for each term in the ~~union~~ **combination** of terms.

7.   (Currently Amended) The method of claim 1 wherein the category of the word is a cell in a term-category matrix~~, and wherein the matrix results from the latent semantic indexing~~.

8.   (Canceled)

9.   (Currently Amended) The method of claim 1 wherein the ~~union~~ **combination** of terms is generated by interleaving individual word-terms with their corresponding word-classes.

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10. (Currently Amended) A method comprising:

receiving, by a processor-based device, a communication that comprises **[[a]] at least one** word**, wherein each of the at least one word** [[that]] is a natural-language word;

generating by the processor-based device a ~~union~~ **combination** of terms**, based on the word,** comprising:

   (i) a ~~first~~ set of word-terms, and

   (ii) a set of word-classes**,**

   wherein a term is one of a word-term and a word-class;

selecting by the processor-based device a plurality of terms from the ~~union~~ **combination** of terms, wherein the selecting is based on an information-gain value of each term in the ~~union~~ **combination** of terms; **[[and]]**

   generating by the processor-based device a term-category matrix, wherein:

      (i) the term-category matrix comprises the plurality of terms and a plurality of categories, and

      (ii) each term in the term-category matrix is associated with at least one category; and

classifying the communication by utilizing a joint classifier upon the ~~plurality of terms~~ **at least one word**, wherein the joint classifier comprises ~~at least one~~ **the** term-category matrix ~~that results from the selecting based on information-gain values and from applying latent semantic indexing to the plurality of terms~~.

11. (Currently Amended) The method of claim 10 wherein a cell *i, j* of the term-category matrix ~~comprises~~ **represents** a classification by the processor-based device of an *i-th* selected term into a *j*-th category.

12. (Currently Amended) A method comprising:

receiving, by a processor-based device, a communication that comprises a word that is a natural-language word;

generating by the processor-based device a ~~union~~ **combination** of terms**, based on the word,** comprising:

>   (i) a ~~first~~ set of word-terms, and
>
>   (ii) a set of word-classes**,**
>
>   **wherein a term is one of a word-term and a word-class**;

selecting by the processor-based device a plurality of terms from the ~~union~~ **combination** of terms, wherein the selecting is based on an information-gain value of each term in the ~~union~~ **combination** of terms, and

>   wherein the selecting comprises:
>
>   i) calculating an information-gain value for each term in the ~~union~~ **combination** of terms that corresponds to the word,
>
>   ii) sorting the terms in the ~~union~~ **combination** of terms in a descending order of information-gain value,
>
>   iii) setting a threshold of an information-gain value corresponding to a specified percentile, and
>
>   iv) selecting **only** the terms from the ~~union~~ **combination** of terms ~~having~~ **that have** an information-gain value greater than or equal to the threshold to generate **[[a]]** **the** plurality of terms.

13. (Currently Amended) The method of claim 12 wherein the selected terms in the plurality of terms are processed by the processor-based device to form a term-category matrix from which a joint classifier determines at least one ~~one or more categories~~ **category** for the word**, and wherein the processor-based device comprises the joint classifier**.

14. (Currently Amended) The method of claim 12 further comprising:

~~performing by a joint classifier joint latent semantic indexing upon the plurality of terms to determine a category for the word, wherein the processor-based device comprises the joint classifier~~.

generating by the processor-based device a term-category matrix, wherein:

> **(i) the term-category matrix comprises the plurality of terms and a plurality of categories, and**

> **(ii) each term in the term-category matrix is associated with at least one category;**

selecting from the term-category matrix, by the processor-based device, a category for the word; and

routing the communication, by the processor-based device, to a particular one of a plurality of destination terminals of a communication system, wherein the routing is based on the category of the word, and wherein the communication system comprises the processor-based device and the plurality of destination terminals.

15. (Currently Amended) An apparatus comprising:

a processor-based device operative to:

receive a communication that comprises a word that is a natural-language word; and

classify the communication by utilizing a joint classifier that is operative to:

generate a ~~union~~ **combination** of terms**, based on the word,** comprising:

(i) a set of word-terms, and

(ii) a set of word-classes**,**

wherein a term is one of a word-term and a word-class;

select a plurality of terms from the ~~union~~ **combination** of terms, based on an information-gain value of each term in the ~~union~~ **combination** of terms; and

~~perform latent semantic indexing upon the plurality of terms to~~ determine a category of the word**, based on a term-category matrix, wherein:**

(i) the term-category matrix comprises the plurality of terms and a plurality of categories, and

(ii) each term in the term-category matrix is associated with at least one category.

16. (Currently Amended) The apparatus of claim 15 wherein the processor-based device comprises a switch that is operative to route the communication, based on the category of the word **determined by the joint classifier**, to a destination terminal of a communication system that comprises the apparatus and the destination terminal.

17. (Currently Amended) The apparatus of claim 15 wherein the category of the word is a cell in [[a]] **the** term-category matrix~~, and wherein the matrix results from the latent semantic indexing~~.

18. (Currently Amended) An article of manufacture comprising:

a machine-readable storage medium that is a non-transitory storage medium and that comprises software code that when executed implements the steps of:

receiving a communication that comprises a word that is a natural-language word;

generating a ~~union~~ **combination** of terms comprising:

(i) a set of word-terms, and

(ii) a set of word-classes**,**

wherein a term is one of a word-term and a word-class;

selecting a plurality of terms from the ~~union~~ **combination** of terms, wherein the selecting is based on an information-gain value of each term in the ~~union~~ **combination** of terms;

~~performing latent semantic indexing upon the plurality of terms~~ **applying a joint classifier** to determine a category of the word, wherein the category of the word is a cell in a term-category matrix ~~that results from the latent semantic indexing~~; and

routing the communication**, based on the category of the word,** to a destination terminal in a communication system that comprises the machine-readable storage medium and the destination terminal.